Table I: Derivation of FFY 1995 Aggregate Annualized and Three-Quarter DSH Amounts For Iowa Medicaid Disproportionate Share Program.

	Predicted 1995 MA Inpatient Payments	DSH Adjustment Percentage	Total 1995 DSH	DSH for Jan- Oct 1995
	(1)	(2)	(3)	(4)
U. of Iowa	\$ 58,741,786	.1393	\$ 8,182,731	
Broadlawns	8,635,109	.3500	3,022,288	
Davenport MC	1,033,659	.0925	95,613	
Ottumwa	3,012,133	.1137	342,480	
Iowa Luth.	7,827,484	.1725	1,350,241	
Mercy (Council Bluffs)	4,635,348	.1701	788,473	
St. Lukes (SC)	4,560,948	.0366	166,931	
Marian HC	5,585,144	.0260	145,214	
St. Lukes (CR)	8,072,101	.0574	463,339	
St. Joseph's (Omaha)	3,028,579	.2645	801,059	
U. of Neb. MC	4,275,983	.2612	1,116,887	
Ch. of Omaha	1,841,978	.5196	957,092	
	\$ 111,250,252		\$ 17,432,348	\$ 13,074,261

Formula:

(b)
$$(Col. (4) Total) = (.75) x (Col. (3) Total)$$

Table II: Effect of State Plan Changes on Total 1995 DSH Payments

Projected Annual Aggregate DSH Under State Plan Prior to Jan 1, 1995	Projected Annual Aggregate DSH Under State Plan After Dec 31, 1994		
(1)	(2)	(3)	
\$ 6,186,000*	\$ 17,432,348	\$ 1,546,000+\$ 13,074,261 = \$ 14,620,261	

^{*} Preliminary Allotment for 1995, FR, Fri., Jan 13, 1995 p.3252

Table III: Derivation of Predicted 1995 MA Inpatient Payments

A. Derivation of Predictive MA \$ Multipliers

1. U. of Iowa. The U. of Iowa stands alone. It has the longest "tail" of late billings; it has a large number of out-of-state billings (which also arrive late); and it seems to have the best in-house prediction activity. Total MA since '91, through the 1994 year (with billings paid up through July 26, 1995) increased at a rate of 14.1% per year. However, the current prediction of their fiscal officer is that 1995 receipts for inpatient MA payments will increase about 12% over 1994. Therefore, we have used a figure of \$58,741,786, which is about \$1.1 million below what the prediction would be, if we used the 14.1% figure. The data for U. of Iowa:

Year MA Payments from Iowa, Illinois, and Nebraska
 '91 \$ 35,195,219
 '93 \$ 46,613,377
 '94 \$ 52,448,023 (July 26, 1995 report; this may increase somewhat in the next year)
 '95 \$ 58,741,786 (Projected at 1.12 x '94 payment)

2. All Other Hospitals

(a) Derivation of the Predictor

	<u>91</u>	<u>93</u>
Broadlawns	\$ 5,928,834	\$ 7,787,797
Davenport	926,429	932,232
Ottumwa	2,672,000	2,716,570
Iowa Lutheran	6,748,892	7,059,419
Mercy (Council Bluffs)	4,156,000	4,180,509
	\$ 20,432,155	\$ 22,676,527

Two Year Predictor =
$$\frac{22,676,527}{20,432,155}$$
 = 1.1088

(b) Application of the Predictor of 1995 MA Payments

	1993 Reported	1995 Predicted
Broadlawns	\$ 7,787,797	\$ 8,635,109
Davenport	932,232	1,033,659
Ottumwa	2,716,570	3,012,133
Iowa Lutheran	7,059,419	7,827,484
Mercy (Council Bluffs)	4,180,509	4,635,348
St. Luke's (Sioux City)	4,113,409	4,560,948
Marian Health Center	5,037,107	5,585,144
St. Luke's (Cedar Rapids)	7,280,033	8,072,101
St. Joseph's (Omaha)	2,731,402	3,028,579 -
U. of Neb. MC	3,856,406	4,275,983
Children's of Omaha	1,661,236	1,841,978

Note: As laid out above, the 1991 and 1993 data were used for five hospitals (1994 payments, in the case of most hospitals, are still being paid, and thus not a good basis for prediction) to derive a two year predictor of change in payments. This factor is 1.1088, which was then applied to the 1993 reported payments (as of late 1994) for all hospitals.

Table IV: Derivation of the 1995 DSH Adjustment Percentages for Calculation of the Aggregate DSH.

1. Background

- (a) The DSH Adjustment percentage is calculated for urban hospitals with more than 100 beds (all DSH hospitals in these calculations meet these criteria) by use of the formula:
 - (i) DSH Adj. % = (P-20.2).8 or .825+5.88

OL

For hospitals with more than 30% of net revenues from state appropriations for indigent care, a flat 35%, if chosen as an alternative.

(ii) where P = Medicare Days for SSI eligibles
Total Medicare Days

+ Medicaid Days
Total Hospital Days

Note: For children's hospitals, the second term is multiplied by two, in the absence of significant Medicare activity, per Section 1923 of the Social Security Act.

(iii) where the source for the first term in the equation is the SSIR, calculated by HCFA, and reported by the Medicare intermediaries; and,

where the source for the second term's denominator is the hospital annual Medicaid Cost Report; and,

where the source for the second term's numerator is the "reimbursement detail", reported at various intervals for the years following the hospital fiscal year, and including all MA days for Iowa MA recipients.

Table IV (continued)

2. Tabulation of the Calculated DSH Adjusted Percentages

Hospital	Pt. A/SSI	<u>MA %</u>	<u>P</u>	<u>DSH</u>
	Total Pt.A			Adjustment %
Broadlawns	.1368	.3983	.5351	.3500**
Davenport	.1159	.1269	.2428	.0925
Ottumwa	.0579	.2107	.2686	.1137
Iowa Lutheran	.0397	.3001	.3398	.1725
Mercy (Council	.0562	.2807	.3369	.1701
Bluffs)				
U. of Neb. MC	.0842	.3631	.4473	.2612
Children's of Omaha	.3821	.3783	.7605	.5196
St. Luke's (SC)*	.0278	.1400	.1678	.0366
Marian (SC)	.0127	.1389	.1515	.0260
St. Luke's (CR)*	.0279	.1720	.1999	.0574
St. Joseph's (Omaha)	.0876	.3637	.4513	.2645
U. of Iowa	.0694	.2305	.2999	.1393

^{* &#}x27;93 SSIR; all other 10/1/94 SSIRs, as reported by Medicare intermediaries for Iowa and Nebraska.

^{**} Meets the 35% state and local appropriations-for-the-indigent criterion

Table IV (continued)

- 3. Derivation of the Medicaid Percentage for the DSH Hospitals
 - (a) The MA percentage requires knowledge of two quantities, the number of MA days for 1995, and the number of total days for the year.
 - (b) MA Days Predictor.
 - (i) We used the overall 1991 and 1994 data to estimate a predictor. Here, reported days were:

1991: 51,709 MA days in six DSH hospitals (not including U. of Iowa)

1993: 47,844 MA days in the same group

$$\frac{1993}{1991} = \frac{47,844}{51,709} = .9253$$
 two-year-decline multiplier.

(ii) For the U. of Iowa, we used the '93 data and the July 26, 1995 report of '94 data to derive an annual decline multiplier of .9549.

(c) Predicted MA Days

	<u>'93 MA Days</u>	'95 MA Days
Broadlawns	12,330	11,408
Davenport	1,223	1,132
Ottumwa	7,279	6,735
Iowa Lutheran	18,989	17,571
Mercy (Council	8,023	7,424
Bluffs)		
U. of Neb. MC	2,926 (Iowa)	2,707 (Iowa)
Children's of Omaha	1,568 (Iowa)	1,451 (Iowa)
U. of Iowa	51,639	47,084
St. Luke's (SC)*	7,148	6,614
Marian (SC)	7,773	7,192
St. Luke's (CR)*	15,594	14,429
St. Joseph's (Omaha)	2,668 (Iowa)	2,469 (Iowa)

Table IV (continued)

d. Estimating Total Days for 1994 and 1995.

We have total days for 12 hospitals in 1992, for 11 in 1993, and 8 of 12 hospitals for 1994. We made two calculations:

- (i) We calculated the percentage change in total days for 10 hospitals, from 800,176 to 750,051 total days, comparing their total days for 1992 and 1993. Here, there was a decline approximately 6 percent ('93 days were 93.74% of '92 days).
- (ii) We calculated the percentage change for 6 hospitals, using '93 days and '94 days. Here, there was a decline approximately 7 percent from '93 to '94 ('94 days = 92.79% of '93 days).

Accordingly, we chose the mid-point of the two (93.26) as our multiplier. We then multiplied total days in '93 (for those hospitals with missing values for '94) by .9326. We then performed the same operation in all 13 hospitals, to derive total days for '95.

The derivation of the multiplier – and the estimated '95 days – is illustrated below:

Reported and Estimated Total Days					
<u>Hospital</u>	<u>92</u>	<u>93</u>	<u>94</u>	<u>95</u>	
U of Iowa	231,539	217,460	219,000*	204,239	
Broadlawns	46,631	41,552	30,713	28,643	
Davenport MC	11,333	10,258		8,922	
Ottumwa	33,804	36,757		31,969	
IA. Lutheran	83,295	67,318	_	58,549	
Mercy/Council Bluffs		34,097	28,358	26,447	
U of Neb. M/C	82,234	83,147		72,317	
Children's of Omaha	24,899	24,131	-	20,988	
St. Luke's (SC)	67,966	57,777	50,666	47,251	
Marian Health Center	96,221		55,508	51,767	
St. Luke's (CR)	109,154	100,711	89,938	83,876	
St. Joseph's (Omaha)	109,321	110,940	103,288	96,324	

^{*} Note: Fiscal year ends 12/20/94. Estimate produced by hospital financial officer.

Table IV (continued)

(e) Estimating The MA Percentage For 1995

Hospital	Estimated <u>MA</u> <u>Days</u>	Estimated Total Days	MA Percentage
U. of Iowa	47,084	204,239	23.05
Broadlawns	11,408	28,643	39.83
Davenport	1,132	8,922	12.69
Ottumwa	6,735	31,969	21.07
Iowa Lutheran	17,571	58,549	30.01
Mercy (Council Bluffs)	7,424	26,447	28.07
U. of Neb. MC*	26,255	72,317	36.31
Children's of Omaha*	7,939	20,988	37.83
St. Luke's (SC)	6,614	47,251	14.00
Marian Health Center	7,192	51,767	13.89
St. Luke's (CR)	14,429	83,876	17.20
St. Joseph's (Omaha)*	35,035	96,324	36.37

^{*} Entire hospital: includes both Iowa and Nebraska days.

Following are assurances applicable to inpatient hospital services as required by 42 CFR 447.253 and 255.

1. Payment Rates. The Iowa Department of Human Services has found that Medicaid pays for inpatient hospital services through rates that are reasonable and adequate to meet the costs that must be incurred by efficiently and economically operated providers to provide services in conformity with applicable state and federal laws, regulations, and quality and safety standards. An efficiently and economically operated provider is defined as follows:

For hospitals located in rural areas (cities with 6000 or less population) such a provider would have an occupancy rate of at least 40% and a Title XIX Utilization Rate of at least 9%, which is the average for providers in this population group.

For hospitals located in urban areas (defined as cities with more than 6000 population), an efficient and economic provider would demonstrate the following characteristics: at least a 70% occupancy rate, a Title XIX Utilization Rate of at least 11% (average for this population group), at least 2.3 Title XIX Discharges per 100 population (average for this population group), and an Average Length of Stay at least equal to the average for this population group, 4.9 days.

- 2. Hospitals which service a disproportionate number of lowincome patients with special needs. The Department's policies contain a special provision pertaining to reimbursement of hospitals serving a disproportionate number of low-income patients.
- 3. Reimbursement for hospital patients receiving service at an inappropriate level of care. The Department has in effect a provision that for recipients determined by the Iowa PRO to need only skilled nursing care or nursing care, the hospital is reimbursed at the statewide average rate applicable for that type of care.
- 4. <u>Payment rates adequate to assure that recipients have reasonable access to inpatient hospital services.</u> All licensed hospitals in Iowa currently participate in the

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